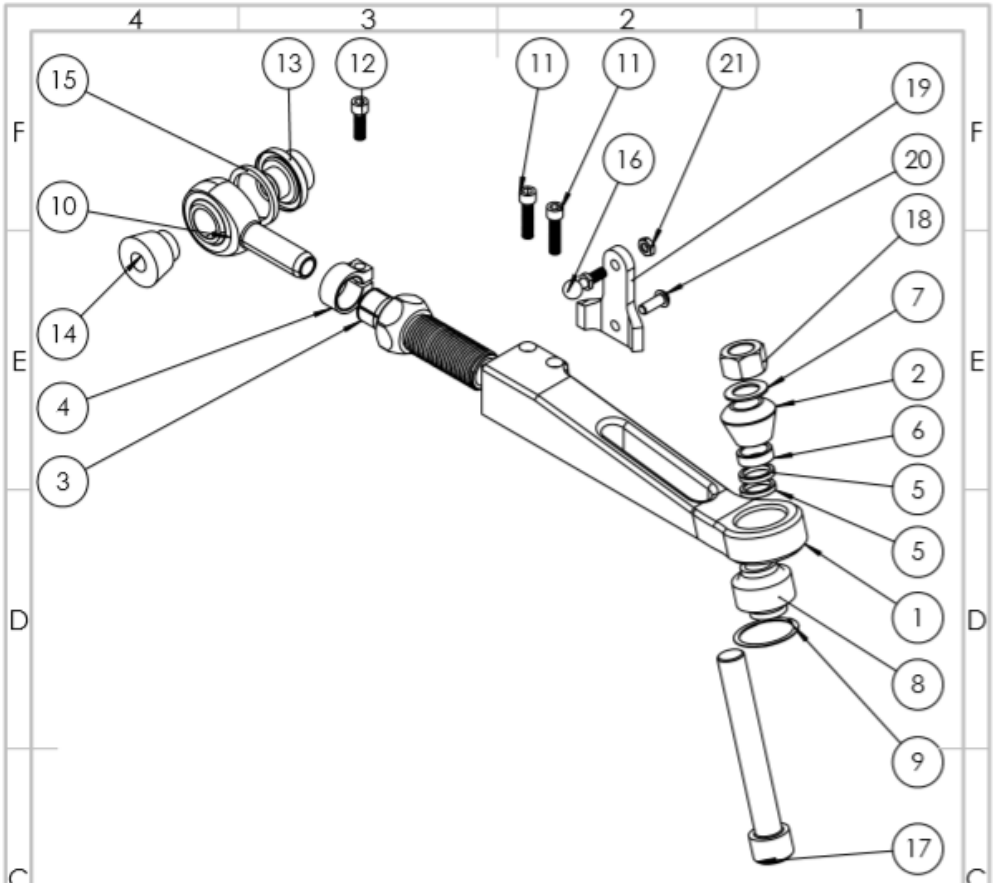
Front Lower Control Street Version Installation Instructions SPL FLCA G29



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	22101	Aluminum Body	2
2	90079	SS Knuckle Spacer	2
3	90017	Extended Adjuster	2
4	90010	Aluminum Clamp	2
5	90113	1/8" Stainless Steel Spacer	4
6	90114	1/4" Stainless Steel Spacer	2
7	97669A210	Aluminum Washer	2
8	HIN10T	FK Spherical Bearing	2
9	WHM-137-S02	SS Snap Ring	2
10	JM12T	FK Rod End	2
11	14-20-1SHCS Ti	1" Titanium Socket Head Cap Screw	4
12	14-20-75SHCS Ti	0.75" Titanium Socket Head Cap Screw	2
13	90071	Limiting Spacer	2
14	90072	Aluminum Spacer	2
15	4061T239	Rubber O Ring	2
16	M6 Ball Screw	Provision for Headlight Adjuster	2
17	(003)FQ0001	5/8-18x4-12" Socket Head Cap Screw	2
18	FH5818CCZY	5/8-18 Centerlock Jam Nut	2
19	Headlight Adjuster Bracket Supra	Headlight Adjuster Bracket	1
20	B18.3.4M - 6 x 1.0 x 16 SBHCS --N	M6x1.5 Button Head Cap Screw	1
21	M6x1.5	M6x1.5 Jam NUt	1

FLCA G29

Thank you for your purchase of this SPL Parts performance suspension product. Please follow these instructions exactly to ensure that the product is able to function to the best of its ability, and you can achieve the most performance out of your vehicle.

Tools Required – Ratchet, 6mm, 8mm, 16mm, 18mm, 21mm, and T40 Torx Sockets, 18mm and 21mm wrench

1. Jack or raise the front end of the car and remove the front wheels.

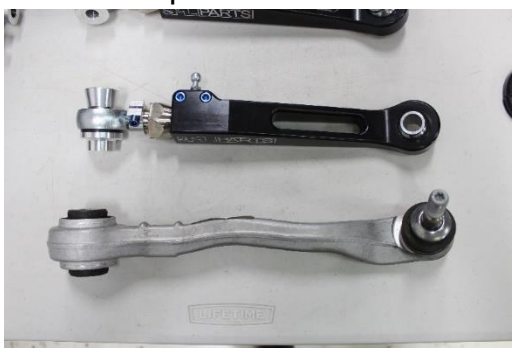
2. Remove the metal and plastic undertrays that are in your way using 8mm and 16mm sockets.

3. Take a photo of your headlight sensor for reference later. Disconnect the headlight aiming sensor by popping the ball out of the lower portion of the mechanism. This should be on the driver's side of the vehicle. If you do not disconnect this, you can damage the sensor as you remove the lower control arm. Be careful, as these are plastic components. Using a plastic ball joint removal tool may be useful here, gently pry it off.

4. Remove the ball joint nut at steering knuckle using a 21mm wrench. If the ball starts to spin at the knuckle, you may need to use an open face wrench and the T40 torx to remove the nut. Remove the nut and bolt at the subframe end of the arm using an 18mm socket and wrench.

5. Use a prybar to remove arm from steering knuckle, then remove the control arm. The ball joint isn't a press fit, so it should come out fairly easily.

6. Place the OEM arm next to the SPL arm, and lengthen the SPL arm to match the OEM arm as closely as possible. Adjust from the hex on the adjuster, do not rotate only the adjuster or only the rod end. This is best done by holding both the rod end and body of the arm in place, and rotating the adjuster by itself. This is explained at the end of the instructions in more



detail.

7. Install the SPL Parts Control Arm at subframe end first with the OEM bolt where the two FLCA Spacers (13, 14) should fit, then install at the knuckle. **The clamping mechanism on the arm should be facing the rear of the vehicle, with the logo facing forwards. If the arm is installed on the wrong side of the vehicle, you can have contact issues with the swaybar.**

8. The 5/8-18 Bolt (17) should go through the spherical bearing (8), followed by the tapered spacer (2) into the knuckle. The use of roll-center spacers (5,6) at the knuckle will vary, **but you must make sure to use the tapered spacer (2)**. If this is not done, the arm may interfere with the knuckle, which could cause failure. Make all of the nuts finger tight.

9. Tighten the bolts at the subframe to 74**ft. lbs.** (100N/M), and the 5/8-18x4 Socket Head Cap Screw (17) to 130 **ft. lbs**. Make sure to lubricate the threads. *SPL Parts is not liable for any issues due to over-torque.*

10. When the arm is installed correctly, the ball joint will be at about a 20° angle. You need to make sure the arm is rotated as far as possible without running the bearing out of articulation so that the endlink does not come into contact with the front lower control arm. Below is a picture showing this.

11. The kit contains a 3D-printed bracket (19), a screw to attach it to the lower control arm (20), and a threaded ball (16) to attach the OEM headlight adjuster to the lower control arm. Install it in the hole that mimics the OEM location for your ride height sensor as closely as possible from the picture you took earlier.

12. If your car is at ride height, the tapered spacer (2) should mimic OEM roll center. If you have lowered your vehicle, you will need to use the roll center spacers (5,6). If you have a lowered vehicle, you must sweep your suspension from full droop to full compression and lock to lock to ensure the bearing (8) does not go out of articulation anywhere in the suspension travel. Not doing this could result in **dangerous** bearing failure. We suggest removing the spring from the shock/coilover to make sure the suspension is travelling through its full sweep, as the shock should be the limiting factor of your travel, not our arm. Make sure that there are no contact issues anywhere in the sweep as well.

13. The suspension on the front of this vehicle is packaged quite tightly. You will need to ensure that the swaybar does not come into contact with the lower control arm, as this can damage the arm and bearings. If there is contact, you may need to purchase an adjustable castor bushing, or reduce the amount of camber you are using.

14. Have the car professionally aligned, as replicating the original settings is nearly impossible. It may be necessary to adjust the toe in order to drive the car to an alignment shop if you either added or subtracted camber. Take these instructions with you to ensure that the arm is adjusted correctly.

15. Check all torques after the first 100 and 500 miles of driving, or after your first two sessions at the track if it is a track car, to make sure that nothing has loosened up due to vibrations.

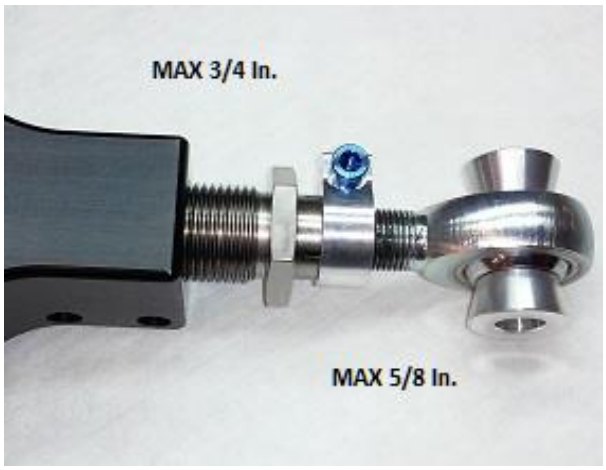
16. Be safe, and enjoy your new upgrade!

SPL Double Adjuster

The hybrid adjuster is what is known as a **double adjuster**. On the outside, the thread is left-handed. On the inside, the thread is right-handed. When the suspension arm is installed, turning the hybrid adjuster will allow you to lengthen/shorten the assembly.
When lengthening/shortening, be sure to keep the arm and rod end from freely rotating when you turn the adjuster. Do not make the following mistakes (threading out **only** the adjuster or threading out **only** the rod end):

Overextended adjuster.

Overextended rod end.



Properly adjusted.

This picture shows a properly threaded adjuster. The rod end (heim joint) will thread out about 2/3 the length of the adjuster. Note the maximum adjustment limits shown.
You'll notice in the pictures that the threads of the rod end and the adjuster have some dark material on them. That is anti-seize compound we apply to all of our products so that adjustments should be easy and trouble free for quite some time.

The advantage of the hybrid adjuster is that you can easily keep the rod end bearing centered during and after alignment. Make sure to keep the bearing centered as shown.